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Glenn Safety Manual – Chapter 22

The Glenn Buddy System w/Change 2 (9/30/2015)

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Change Record

Rev.	Effective Date	Expiration Date	GRC25, Change Request #	Description
B	6/13/2012	6/13/2017	100	Bi-annual update
Change 1	4/15/2014	6/13/2017	N/A	Administrative change to add front cover and change history log to comply with NPR 1400.1 and insert "The GRC shall follow the requirements of...which" in Section 4.0 Policy.
Change 2	9/30/2015	6/13/2017	N/A	Administrative change to remove hyperlinks.

***Include all information for each revision. Do not remove old revision data. Add new rows to table when space runs out by pressing the tab key in the last row, far right column.*

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Chapter 22—The Glenn Buddy System

NOTE: The current version of this chapter is maintained and approved by the Safety and Health Division (SHeD). The last revision date of this chapter was June 2012. The current version is maintained on the Glenn Research Center (GRC) intranet within the BMS Library. Approved by Chief of Safety and Health Division

1.0 PURPOSE

This chapter specifies the requirements, procedures, and responsibilities for implementation of the Glenn Buddy System. It specifies the safety practices to be followed by employees working in potentially hazardous buildings or areas or by employees working alone in other buildings or areas at the Glenn Research Center (GRC) Lewis Field and Plum Brook Station (PBS).

2.0 APPLICABILITY

This chapter applies to

- All NASA GRC (Lewis Field and PBS) organizations and employees
- All GRC support service contractors, other NASA contractors, and non-NASA and non-contractor individuals present at GRC in accordance with the terms of their contracts or agreements with NASA
- Other Government organizations that are tenants at GRC or any other location under the Center's jurisdiction

3.0 BACKGROUND

The Glenn Buddy System was developed to address not only agency personnel-tracking requirements for persons participating in hazardous operations but also to account for employees who may be working alone. Such situations could arise due to work located in isolated areas or activities occurring outside normal working hours.

4.0 POLICY

The GRC shall follow the requirements of NASA Procedural Requirement (NPR) 8715.3 which specifies that a buddy system be used for employees working on activities classified as hazardous operations. The Center has expanded this policy to cover employees working alone in a nonhazardous environment.

5.0 RESPONSIBILITIES

The following individuals are responsible for implementing the Glenn Buddy System.

5.1 Chief of Safety and Health Division

The chief of the Safety and Health Division (SHeD) is responsible for establishment of the Glenn Buddy System as described in this chapter and for ensuring that the system is communicated to all employees.

5.2 Area Safety Committee Chair

Area safety committee chairs (ASCC) are responsible for issuing approved research or facilities operations permits and for ensuring that the appropriate Buddy System Level is identified in the conditions of operations.

5.3 Supervisor

Ensures that personnel use the buddy system whereby an adjacent or nearby person not directly exposed to the hazard serves as an observer to render assistance where the risk of injury is high (NPR 8715.3 Requirement 32327). It is the supervisor's responsibility to prescribe the use, and appropriate level of the Buddy System for all work assignments; wherein the normal work safety of employees under their jurisdictions could be compromised, unless the cognizant of the safety committee is otherwise established. The supervisor is responsible for reviewing the need for and use of some level of the Buddy System within their jurisdictions. Also, for ensuring that written instructions

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are issued for work situations of a special or continuing nature. This should incorporate the job safety analysis or job hazard analysis process.

5.4 Employees

Employees are required to follow the Buddy System conditions identified on any safety permits that they are working under. Also, employees are required to follow the requirements in this chapter when working alone or when their work is considered a hazardous operation.

5.5 Emergency Dispatcher

The emergency dispatcher is required to follow chapter requirements involving employees working alone after hours.

6.0 REQUIREMENTS

6.1 Buddy System Levels of Control

The following definitions are required levels of control within the Buddy System in rank order from the highest degree of control to the lowest:

6.1.1 Challenge-Check System

Work procedure that requires a written challenge list and a verbal and/or written check-in answer (e.g., aircraft checklists).

6.1.2 Lifeguard System

Work procedure in which one or more persons are performing the work while at least one person who is not exposed to the potential hazard has only the work/responsibility of safeguarding the rest of the work party (e.g., radiation monitoring or jobs requiring lifelines and other similar special protective gear).

6.1.3 Two-Person System

Work situations in which each of two or more persons present must be capable of detecting incorrect or unauthorized procedures with respect to the task to be performed. In this system, persons are not required to have equal knowledge but only the capability of detecting incorrect or unauthorized procedures (e.g., in electrical substation operations). In addition to performing the assigned operations, each person is responsible for checking the safe operation of the other(s).

6.1.4 No-One-Along System

Situations in which two or more persons, not necessarily having the same skills or training are working in the same area and checking with reasonable frequency on the continuing well-being of each other.

6.1.5 Frequented Area System

Situations in which persons work at individual tasks in areas frequented by other workers, each person in the area having the implied responsibility for checking at reasonable frequency the well-being of the others in the area (e.g., in shops, during research tests, and in construction areas).

6.1.6 Communication-Check System

Situation in which a communication check (e.g., visual, audible, radio, telephone, or television) is used in lieu of direct, close contact (e.g., in machinery operation surveillance, test operations, or patrols).

6.1.7 Other

Other equipment means subject to approval by the ASCC or SHED.

6.2 Potentially Hazardous Buildings and Areas

If the Buddy System is to be implemented in continuous work situations or for one-time or special situations, written instructions shall be posted in a conspicuous place. Written instructions must always be used for work situations in

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which the challenge-check system is prescribed. Copies of written instructions shall be filed with SHeD at the time they are issued.

When verbal instructions are used to implement the Buddy System, the supervisor shall directly instruct each person on the work team; this responsibility may be assigned to the project, team, or equivalent leader if one is specifically appointed. Each member of the work team must be informed of the makeup of the team and the level of the Buddy System that is to be used.

If there is any doubt about which of the two levels of the buddy system is to be used, apply the most stringent requirements.

6.3 Other Buildings and Areas

In nonhazardous work areas, including office areas, it is preferred that employees not work alone. At times, however, it might be possible to have two or more employees working alone, depending upon the nature of the work to be performed. To ensure the physical welfare of employees working alone (i.e., having no personal contact with any other employee for a period of at least 1 hour), the following practice will be observed:

- When an employee is assigned to work alone, either during or after regular-duty hours, the supervisor will notify the emergency dispatcher at 3–2088 (GRC) or at 4–3226 (PBS) and will give the employee's name, location, and telephone number. The supervisor will thus assume initial responsibility for the well-being of the employee. The supervisor will then instruct the employee to call the emergency dispatcher hourly and on departure. The emergency dispatcher shall record the time of the call, the employee's name, and the employee's location. It is the employees' responsibility to inform the emergency dispatcher of any change in their physical location while they are working alone.
- If the supervisor is not present, the assigned employee will be responsible for providing the emergency dispatcher with the prescribed information at the time the employee begins solitary duty. During such duty, the employee must call in hourly and shall comply with other reporting requirements.
- The supervisor will encourage the use of the communication-check system for any employee who decides to remain at work alone after the regular shift has ended or to return to the Center during an off-shift period. Employees who elect to use the system must comply with the call-in requirements.
- The emergency dispatcher will conduct a telephone check or direct the security force to perform a physical check if the employee has not called in at the designated time (i.e., within 1 hour of previous call). This follow-up is to be no later than 15 minutes past that designated time.

6.0 Verification- Emergency dispatcher will conduct a telephone check or direct the security force to perform a physical check if the employee has not called in at the designated time.

7.0 RECORDS

- Challenge-Check System Written Instructions are maintained by SHeD and the appropriate supervisor.
- GRC624 Form - After Hour Notification, maintained by Security Dispatch.

8.0 REFERENCES

Document number	Document name
NPR 8715.3	NASA Procedural Requirement: NASA General Safety Program Requirements
GSM Ch 10	Hazardous Operations
GSM Ch 1A	Glenn Safety Permit System
GSM Ch 33	Job Hazard Analysis

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APPENDIX A.—DEFINITIONS AND ACRONYMS

Area safety committee chairperson (ASCC)

Glenn Research Center (GRC)

NASA Procedural Requirement (NPR)

Plum Brook Station (PBS)

Safety and Health Division (SHeD)

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